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Atty. Docket No. GEMS-0135-PUS

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AMENDMENTS TO THE CLAIMS

In the Application, please amend or cancel each claim as hereinafter indicated.

1. (Currently Amended) A method of contrast matching a first image and a second image, said method comprising the steps of:

(a) generating operating a controller to generate an image ratio of [[the]] said first image and [[the]] said second image, wherein said image ratio having has a numerator representing said first image and a denominator representing said second image;

(b) regularizing operating said controller to regularize [[the]] said image ratio by adding a constant to [[the]] said denominator to form a regularized image ratio;

(c) filtering operating said controller to filter [[the]] said regularized image ratio to form a filtered ratio; and

(d) multiplying operating said controller to multiply [[the]] said second image by [[the]] said filtered ratio to form an adjusted image having a contrast that better matches the contrast of said first image as viewed on a monitor.

2. (Currently Amended) A method as recited in claim 1, wherein filtering comprises low-pass filtering step (c) is at least partially accomplished by operating said controller to execute a low-pass filter function.

3. (Currently Amended) A method as recited in claim 2, wherein low-pass filtering comprises boxcar filtering said low-pass filter function is a boxcar type filter function.

4. (Cancelled)

5. (Currently Amended) A method as recited in claim 1, wherein regularizing step (b) further comprises multiplying operating said controller to multiply [[the]] said numerator by [[the]] said second image and also multiply [[the]] said denominator by

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[[the]] said second image [[and]] before adding [[the]] said constant to [[the]] said denominator.

6. (Currently Amended) A method as recited in claim 1, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the step (d) is accomplished so that said adjusted image is substantially contrast matched to [[the]] said first image.

7. (Currently Amended) A method as recited in claim 1, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the step (d) is accomplished so that said adjusted image is substantially brightness matched to [[the]] said first image.

8. (Currently Amended) A method as recited in claim 1, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the step (d) is accomplished so that said adjusted image is substantially both contrast matched and brightness matched to [[the]] said first image.

9. (Currently Amended) A method as recited in claim 1, ~~further comprising prior to filtering, regularizing an image ratio of the second image with respect to the first image to form a regularized image ratio~~ wherein said controller comprises at least one computer.

10. (Currently Amended) A method of operating a digital imaging system having an image forming device coupled to a controller with a monitor, said method comprising the steps of:

- (a) generating operating said image forming device to generate a first digital image;
- (b) generating operating said image forming device to generate a second digital image; and

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(c) matching operating said controller to match ~~[[the]]~~ said second digital image to ~~[[the]]~~ said first digital image by ~~[[.]]~~

(i) generating an image ratio of ~~[[the]]~~ said first digital image and ~~[[the]]~~ said second digital image, wherein said image ratio having has a numerator representing said first digital image and a denominator representing said second digital image;

(ii) regularizing ~~[[an]]~~ said image ratio of the second image with respect to the first image to form a regularized image ratio;

(iii) filtering ~~[[the]]~~ said regularized image ratio to form a filtered ratio; and

(iv) multiplying ~~[[the]]~~ said second digital image by ~~[[the]]~~ said filtered ratio to form an adjusted image that better matches said first digital image as viewed on said monitor.

11. (Currently Amended) A method as recited in claim 10, wherein ~~filtering comprises low-pass filtering sub-step (iii) is at least partially accomplished by executing a low-pass filter function.~~

12. (Currently Amended) A method as recited in claim 11, wherein ~~low-pass filtering comprises boxcar filtering said low-pass filter function is a boxcar type filter function.~~

13. (Cancelled)

14. (Currently Amended) A method as recited in claim 10, wherein ~~regularizing comprises sub-step (ii) is at least partially accomplished by multiplying~~ ~~[[the]]~~ said numerator by ~~[[the]]~~ said second digital image, [[and]] multiplying ~~[[the]]~~ said denominator by ~~[[the]]~~ said second digital image, and adding ~~[[the]]~~ a constant to ~~[[the]]~~ said denominator.

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15. (Currently Amended) A method as recited in claim 10, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the sub-step (iv) is accomplished so that said adjusted image is substantially contrast matched to [[the]] said first digital image.

16. (Currently Amended) A method as recited in claim 10, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the sub-step (iv) is accomplished so that said adjusted image is substantially brightness matched to [[the]] said first digital image.

17. (Currently Amended) A method as recited in claim 10, wherein ~~multiplying comprises multiplying the second image by the filtered ratio to form the adjusted image~~ where the sub-step (iv) is accomplished so that said adjusted image is substantially both contrast matched and brightness matched to [[the]] said first digital image.

18. (Currently Amended) An imaging system comprising:
an image forming device for generating a first image and a second image; and
a controller coupled to said image forming device for receiving said first image and said second image;

wherein said controller is operable for (i) generating an image ratio of [[the]] said first image and [[the]] said second image, said image ratio having a numerator representing said first image and a denominator representing said second image; (ii) regularizing [[an]] said image ratio of the second image with respect to the first image to form a regularized image ratio by adding a constant to [[the]] said denominator to form a regularized image ratio[.]; (iii) filtering [[the]] said regularized image ratio to form a filtered ratio[.]; and (iv) multiplying [[the]] said second image by [[the]] said filtered ratio to form an adjusted image that better matches said first image as viewed on a display.

19. (Currently Amended) An imaging system as recited in claim 18, said imaging system further comprising a display monitor coupled to said controller for displaying said adjusted image.

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20. (Currently Amended) An imaging system as recited in claim 18, said imaging system further comprising a storage medium coupled to said controller for storing ~~[[the]]~~ said first image, ~~[[the]]~~ said second image, and ~~[[the]]~~ said adjusted image.